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ABSTRACT

A case study of an educational action research oriented project in Quebec--a continuing education project at the elementary level (EPEL)--is described to show the contributions of the case study method to human development, needs assessment, curriculum development, and innovative teaching. The case study method is suggested as a means to pinpoint the essential conditions of some aspects of action research. An introduction addresses the difficult challenge of conducting an educational action research project, and the case study is presented as a tool for planning and analyzing data. An example is provided of the use of a macroscopic view in a case study which focuses on the socio-historic context of projects and specifically addresses Quebec education in the 1970s, pedagogy in Quebec, and educational research during the 1960s in Quebec. The microscopic view is then explained and illustrated. This part of the study deals with the project history, objectives, ideology, human resources, physical circumstances, and participants: parents, students, teachers, principal, and school board administrators. The vertical and horizontal reading of a matrix that combines the main points gathered from interviews with the participants is discussed. Twenty-six references are listed. (LMM)

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# NEW TRENDS FOR NEW NEEDS IN INSTRUCTIONAL TECHNOLOGY: THEORY AND DEVELOPMENT

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## INTRODUCTION

Planning an educational action research is not easy, as I have learned in recent years. For my research studies I have conducted many interviews and collected various case studies; I have examined several educational action research projects. As a result, I can cite the case study as my best tool for clarifying meanings and working out strategies that can facilitate the planning and execution of a project. Thus, my research methodology has been based on case study strategies.

It is:

1 - Philosophical, with a survey of individuals' values;

2 - Anthropological, since these were the working tools of the participant observers; and

3 - Pedagogical, oriented toward research based on an educational milieu.

I have investigated the salient information about theoretical and practical approaches by researchers and studied their research problems.

The data I report here projects a macroscopic view focusing on the socio-historic and educational contexts of these projects. I call this approach anthropological, as is the microscopic view.

The latter, which illuminates the content of my survey in a different manner, links it with powerful ideas that include divergent and contradictory opinions, as well as descriptions of the educational milieux.

## I The difficulty of conducting an educational action research project

In my research studies, I have found that conducting an educational action research project is not easy. Even well-organized school projects travel a perilous route. For instance, the "Education permanente à l'élémentaire" project (Continuing Education project at the elementary level) existed approximately five years, gained some international attention, and died. Some other projects, such as "Opération-Humanisation au Saguenay-Lac Saint-Jean" (Humanisation project at Saguenay), "PERFORMA" (In-Service Training project) at the University of Sherbrooke and so on, all had difficulties.

We may ask ourselves these questions: how can a research project be kept on track? When it is alive and well, what training, intervention and research dialectics are involved? What can kill an educational action research? Is it because researchers and participants fail to invest adequate planning? Are the research and intervention models inadequate? In the domain of human relations, is there any dissention among members? Are a combination of these internal and external factors creating a problem?

## II The case study: a tool for collecting and analyzing data

I have decided that the case study method is my best tool for collecting different views about participants' experiences and finding out if a completed school research retains any meaning in the years following its completion. This method carries validity because, first of all, a case is a real experience taken from daily life; it is a problem situation needing diagnosis. Data must be collected, the whole context must by analyzed, and a problem solving mechanism must be divised. (Kemmis, S., 1980; Lippitt, G., 1980; Mucchielli, R., 1972; Stenhouse, L., 1980; Ardoino, J., 1980).

When I began collecting data about an educational action project, I gathered written documents such as reports, scientific tests, government grant forms, theses, and photographs, as well as audio-visual documents, such as audio and video cassettes. I analyzed this material in the light of my research problem: What is the life of an educational project with an action research orientation?

I also interviewed "key informants" of the project, taking notes and taping conversations of the school principal, school board administrators, teachers, parents, students and project researchers.

When interviewing participants, I always asked specific questions, such as: How did the project get started? What was occurring when it was alive? When did they join the project and what did they do?

Meeting only one person at a time, I conducted all my interviews in quiet places, eg. an office or a living room. To my data, I added a personal journal in which I wrote my observations about my interviews, their circumstances and milieux, and so forth.

## 2.1 The analysis

After describing the action research project, I analyzed my data with an eye for action research procedures, the pedagogy employed, evidence of participants' value systems, and so on.

## 2.2 Example of a Macroscopic view: the Continuing Education project at the elementary level ("EPEL")

### 2.2.1. A look at the 1970's in Quebec education

> "EPEL" was an experimental project in which school administrators, teachers and researchers questioned teaching methods, innovative pedagogies, teacher and student attitudes and behaviors. (Angers, 1978: 225).

To more fully understand this project, we must note that in the 1960's Quebec society experienced a major cultural revolution. Participants of the "EPEL" project were its products.

The predominating ideology during the 1960's was deeply rooted in theological and sociological thought. Grand'Maison writes:

> The school appeared an important symbol, ensuring survival of the christianity of these Catholics in

> the face of an anglo-saxon Protestant world. Social institutions and values were evaluated on a religious basis (...). The Quebec Christian ideology was concentrated in the world of culture. Government policies worked on this orientation. With the Parent's Report on Education and the creation of the Department of Education, the focus shifted from the church to the secular authority, that is, the government. (Grand' Maison, 1970: 35).

With the "revolution tranquille" (quiet revolution) a participative and developing ideology immerged with the aim of preserving a culture different from that of other North American groups (Rioux, 1973).

This historical background influenced the "EPEL" group's educational policies and models. For example, the Parent Report on Education counsels emphasis on the quality of teaching rather that quantitative aspects; it urged development of thinking skills and analytic attitude. (Parent, 1966, T. III: 191-203)

With this in mind, "EPEL" researchers set about to influence the qualitive aspect of education.

### 2.2.2 Pedagogy in the province of Québec

Today we talk a great deal about educational models (Lepine, G., 1977) and paradigms (Bertrand et Valois, 1982), but in the 1960's Quebecers talked more about educational concepts and ideological orientation (Paquette, 1976; Parent, 1966; Angers, 1978). Some educational orientations predominated. Among them were the classic pedagogy or traditional instruction in which students functioned

under teacher control. "Free teaching" was a non-directive strategy (Benjamin, 1982; Paquette, 1976), "Open teaching", which was more restrictive than the latter (Paquette, 1976; Paré, 1977), featured several orientations, among them organic pedagogy, on which the "EPEL" project was based.

"EPEL" researchers described their pedagogy in the following manner:

> Organic pedagogy puts an emphasis on developing insights and autonomy. This pedagogy liberates because it opens imaginative and creative ways to the students. It is a stimulus which encourages understanding and the intuitive powers.
>
> The student becomes a self-educator who learns by means of human interactions in a conductive educational environment.

### 2.2.3 Educational research in Quebec during the 1960's

Education researchers in Quebec discovered new ways during the 1960's. Different reports about education urged work on new approaches, such as joining theory and action, affectivity and intelligence, to use the jargon of the times.

After a conscientization about the accessibility of knowledge, action research took foot. It resolved the scientist's ideological problems of joining theory and practice; rather than separating them as in classical research, it combined affectivity with the cognitive domain.

"EPEL" researchers strove to adapt their project to ideas current in their new Quebec society, thus initiating an action research (Angers, 1978).

## 2.3 MICROSCOPIC VIEW

This part of the case study deals with "EPEL's" history, objectives, ideology, human resources, physical circumstances, and participants: parents, students, teachers, principal, school board administrators, and project researchers.

According to the "EPEL" researchers, their project started in the autumn of 1970 with a meeting between the Three Rivers School Board and University of Quebec administrators at the local campus. They wanted to create a research project that would link educational theory with practice. As they needed a school to realize the experimental part of their project, Star Elementary School was designated (Angers, 1973: 1).

This school was in a crowded low-income area in Three Rivers, a city of 200,000 inhabitants. Around Star Elementary School, there are factories, many two or three level houses and the Saint Lawrence Seaway. One side of the school is bounded by playground and the other sides by streets.

In this area some people are chronically unemployed and must rely on government help. Many children from such families attended Star when "EPEL" was going on. Almost all the teachers and administrators lived in other parts of the city.

2.3.1. Objectives

The project's objectives were to study (1) various aspects of learning activities; (2) the human being; (3) the meaning of learning and teaching, especially when teacher attention is given to each individual student; and (4) the duties of students and teachers (Angers, 1971: 1).

At the ideological level, "EPEL" researchers wanted to study the factors that influenced relations between the school, its parent board and external institutions such as the Department of Education.

2.3.2. Analysis: vertical and horizontal readings

Under the vertical readings, I discuss the interviews, pointing out major statements - - eg. concurrence and differences in viewpoints - - by key informants in the same group, such as teachers or parents. With the horizontal reading, analysis in based on the opinions and efforts of all key participants. Finally, my concluding section links the data revealed by the participants with "EPEL's" socio-historical and educational context and the theories proposed by its researchers.

2.3.3. Example of the "EPEL" analysis: vertical reading

I interviewed school board administrators, principals, researchers, parents, students and teachers who participated in "EPEL". Figure 1 shows us their main comments. Administrators,

were deeply implicated as leaders of the project. The acknowledged feeling too much involved in both the school and the researchers' work. They expressed the belief that Star School deserved to have played a larger voice in "EPEL's" planning.

FIGURE 1

MAIN POINTS IN PARTICIPANTS' INTERVIEWS

| ADMINISTRATORS | RESEARCHERS | TEACHERS | PARENTS | STUDENTS |
|---|---|---|---|---|
| - EPEL squeezed us very much.<br>- We experienced better interpersonal communication and human relations.<br>- We developed a participative management throughout the whole school board.<br>- Worked as equals.<br>- We felt too involved in both the school and the researchers' work.<br>- Administrators' leadership was too strong.<br>- Administrators and researchers imposed the project, failing to elicit collaborative agreements and ideas with Star personnel. | - Communications between all involved groups influenced us.<br>- We were involved with different participants at various levels each year.<br>- Our researchers' leadership was excessive.<br>- We planned the research primarily with the administrators only. | - We improved human relations, talking with and understanding each other better. This humanized Star School.<br>- We were not committed as much as we wished because EPEL was imposed on us.<br>- Researchers' ideal were too theoretical.<br>- We created learning materials, experienced organic pedagogy in classrooms, and received a training in pedagogy. | - We enjoyed the welcoming attitudes of researchers and teachers at Star School and the possibility of starting a parents' school committee.<br>- We did not feel involved enough in planning.<br>- We were well informed about EPEL, however. | - We remember the atmosphere of freedom at Star School which facilitated communication between students and teachers.<br>- We realize that we achieved greater autonomy in comparison with our friends in other schools. For instance, we are better prepared to do research by ourselves.<br>- As soon as EPEL was operating, the classroom environment changed for the better. |

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### 2.3.4. Example of the "EPEL" project: horizontal reading

#### 2.3.4.1. "EPEL" and action research

The French researcher and practitioner Henri Desroche, and his English colleague Checkland, describe action research as a collective work of planning by researchers and participants. It implies also a mutual search to resolve a problem, the diagnosis of which is oriented toward participants' needs. (Desroche, 1978; Zuniga, 1981; Barbier, 1979; Morin, 1981).

Prof. Desroche says that there are several action research strategies. The first one, Action Research "ON" (explanation); it studies an action without the factor of field experience, and is oriented toward the researcher's analysis. The second strategy is Action Research "For" (focuses on application). Agents work for the participants, presenting analyses and working strategies. There is also, Action "With". Agents work with the participants, planning the action research together.

#### 2.3.4.2. Diagnosis of problems

After analyzing the Star School situation, researchers defined its problems. They noted that the area was economically poor and that its occupants were considered "tough" and socially deprived. After "EPEL" began, Star School administrators reported less vandalism such as broken windows than the prevailing level. Teachers probably invested with their students' different work habits, but they had accommodated themselves to these behaviors.

Action and research

During a six month period, researchers continued to examine Star's problems through participant observation techniques. They then proposed tentative solutions to teachers and administrators in training sessions about organic pedagogy.

Researcher Mathieu told me "It was our objective to test our theory in an educational setting. Whenever we introduce new educational models, we need to train teachers . . . Classrooms need to be completely transformed, especially by modifying teachers' pedagogical attitudes.

The teachers, however, judged the researchers' approach to problems was too theoretical and regretted that they had not been invited to plan collaborative strategies with them. Despite their reservations, they accepted help, although they did not solicit it.

Parents told me that they enjoyed being more welcome at Star School and they approved of the freedoms that were initiated. However, they were dissatisfied about not having been involved in planning "EPEL".

As Figure 1 reveals, administrators felt quite the opposite about their role.

The researchers did not impose their demands but tried to elicit cooperation, receiving it in varying degrees. These responses show that action research is more effective and far more pleasant for

participants when the latter group not only executes plans but helps to devise them. Thus teachers, parents and administrators who, in this case, felt too deeply involved in planning (execution) would have experienced greater satisfaction, (perhaps would have modified project).

## CONCLUSION

In this paper, instead of explaining the methodology of many educational (action research) oriented projects in Québec (which I have studied) I have decided to deal with only one case study to show the contribution of this method to human development, needs assessment, curriculum development and innovative teaching. Using the case study method, I understood and analysed the dynamics of other projects and gain a holistic view of them.

My approach is a design which will permit us to take an insightful look at current needs in instructional technology. The fundamental requirement, however, is to work methodically with a tool in which the researcher plays the critical role; his/her subjectivity must be valued, and empathy with subjects must be viewed as essential (Morin, A., 1979: 58).

Using case studies in my research permits me to pinpoint the essential conditions of some aspects of action research, which can facilitate the development of appropriate pedagogical models for today. The case study method itself is not new, I believe its use in instructional technology reflects a new trend, at least in my part of Canada, which can advance educational theory and research.

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